

The present invention relates to a contrast-enhanced diagnostic imaging method for monitoring the efficacy of interventional therapies. The contrast agents useful in this method comprise an image-enhancing moiety (IEM) and a state-dependent tissue binding moiety (SDTBM). These contrast agents exhibit state-dependent binding to one or more components of a targeted tissue or tissue component and provide a detectable change in the signal characteristics of the agent once bound to the targeted tissue. As a result, these agents exhibit a binding affinity for, and thus image contrast of, the targeted tissue which changes as the tissue-state changes during therapy.